

CLAIMS

1. A lactic composition comprising at least a bacterial strain selected from the group
5 consisting of *Lactobacillus acidophilus*, *Lactobacillus casei* and a mixture thereof, and a whole broth of each of said bacterial strain or a mixture thereof, characterized in that the lactic composition is useful in the prevention or the treatment of angiogenesis dependant disorders.
- 10 2. A lactic composition according to claim 1, characterized in that the at least one *Lactobacillus acidophilus* strain is strain I-1492 deposited at the CNCM.
- 15 3. A lactic composition according to claim 2, characterized in that it comprises at least 500 millions per gram of a population of living and active micro-organisms of the *Lactobacillus acidophilus* strains after 90 days under refrigeration, where at least 380 millions per gram are micro-organisms of the *Lactobacillus acidophilus* CNCM I-1492 strain.
- 20 4. A lactic composition according to claim 3, characterized in that it further comprises fermented milk proteins or fermented soy proteins.
- 25 5. A supernatant obtained from the lactic composition as defined in any one of claims 1 to 4, characterized in that said supernatant exhibits antiangiogenic properties.
- 30 6. The supernatant according to claim 5, characterized in that said supernatant is concentrated.
7. The supernatant according to claims 5 or 6, characterized in that said supernatant is 10X concentrated.
8. The supernatant according to any one of claims 5 to 7, characterized in that it comprises molecules of a size larger than 5000 kDa.

9. Use of the supernatant as defined in any one of claims 5 to 8, as an antiangiogenic agent.
10. Use of the supernatant as defined in any one of claims 5 to 8, in the prevention or
5 the treatment of an angiogenesis dependant disorder in a mammal.
11. Use according to claim 10, wherein said mammal is a human being.
12. Use according to claim 10, wherein said disorder is selected from the group
10 consisting of retinopathy, infantile haemangioma, rheumatoid arthritis, psoriasis, duodenal ulcers, post-angioplasty restenosis and tumour growth.
13. Use of a supernatant according to claim 12, wherein said disorder is tumour
growth.
14. Use of the lactic composition as defined in any one of claims 1 to 4, as an
antiangiogenic agent.
15. Use of the lactic composition as defined in any one of claims 1 to 4, in the
20 prevention or the treatment of an angiogenesis dependant disorder in an
mammal.
16. Use according to claim 15, wherein said mammal is a human being.
17. Use according to claim 15, wherein said disorder is selected from the group
25 consisting of retinopathy, infantile haemangioma, rheumatoid arthritis, psoriasis, duodenal ulcers, post-angioplasty restenosis and tumour growth.
18. Use according to claim 17, wherein said disorder is tumour growth.
19. Method for prevention or treatment of an angiogenesis dependant disorder, the
30 method comprising the step of administering to a mammal an effective amount of
the lactic composition as defined in anyone of claims 1 to 4 or of the supernatant
as defined in any one of claims 5 to 8.

20. Method according to claim 19, wherein said mammal is a human being.
21. Method according to claim 19, wherein said disorder is selected from the group consisting of retinopathy, infantile haemangioma, rheumatoid arthritis, psoriasis,
5 duodenal ulcers, post-angioplasty restenosis and tumour growth.
22. Method according to claim 21, wherein said disorder is tumour growth.
23. Method according to any one of claims 19 to 22, wherein said administration is
10 oral administration.
24. A method of obtaining the supernatant as defined in any one of claims 5 to 8, characterized in that it comprises the steps of:
- 15 a. suspension of at least one lactic acid bacteria strain selected from the group consisting of *Lactobacillus acidophilus* and *Lactobacillus casei* in a suitable medium to get a suspension;
- b. incubation of the suspension;
- c. dilution of the suspension in said suitable medium;
- d. incubation;
- 20 e. centrifugation to obtain an liquid; and
- f. filtration said liquid to obtain the supernatant.
25. The method according to claim 24, characterized in that the suitable medium is complex MRS.
26. The method according to claim 24, characterized in that the incubation of step d is at 37°C.
27. The method according to claim 24, characterized in that the centrifugation is at
30 1000 x g for 15 min.
28. The method according to claim 24, characterized in that the filtration occurs on a 0.45 µm filter then on a 0.22 µm filter.
- 35 29. The method according to anyone of claims 24 to 28, characterized in that it

further comprises the steps of:

- g-adding the supernatant of step f to Ultrafree-4™ tubes;
- h-centrifugation to obtain two layers;
- i-separation of the two layers into two separate Eppendorf™ tube.

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30. The method according to claim 29, characterized in that centrifugation is at 3000 x g for 30 min.

10 31. The method according to any one of claims 24 to 30, wherein at least one *Lactobacillus acidophilus* strain is strain I-1492 deposited at the CNCM.